

REMARKS

Claims 1 and 10-14 stand rejected under 35 USC §102(b) as being anticipated by Adusumilli, U.S. patent 5,870,749. Claims 2-9 stand rejected under 35 USC §103(a) as being unpatentable over Adusumilli, U.S. patent 5,870,749 in view of Sasagawa et al., U.S. patent 6,028,863.

Claims 1, 10, and 14 have been amended to more clearly state the invention.

Applicants respectfully submit that each of the independent claims 1, 10, and 14, as amended, is clearly patentable over all the references of record including Adusumilli and Sasagawa et al. Applicants respectfully submit that considering the subject matter as a whole of the claimed invention as recited in each of the independent claims 1, 10, and 14 requires a conclusion that all the claims 1-14 are patentable.

Reconsideration and allowance of each of the pending claims 1-14, as amended, is respectfully requested.

Adusumilli, U.S. patent 5,870,749 discloses a method for translating attribute data carried in Common Management Information Protocol (CMIP) Protocol Data Units (PDUs) to/from custom designed data structures. A supplementary method for incorporating user's preferences on the data structures and the relationships between different fields in these data structures and the corresponding attribute values is also provided. The translation method automatically performs conversions between the user-designed data structures and various CMIP requests/responses automatically, and, in accordance with user's preferences. The method allows users to simplify and/or

compact the storage representation of the Managed Objects by taking advantage of application specific knowledge, and by eliminating unnecessary fields from CHOICE data types in the target data structures. Benefits of the methods presented in this disclosure include automatic translation of CMIP PDUs to/from user-designed data structures, ability to store Managed Object data in space-efficient manner, and automatic generation of data structures for use in communicating with devices using proprietary data representation. At column 11, lines 18-50 states:

"The MOClassTable shown in FIG. 4 contains an entry for each configured Managed Object Class. The localFormClassId field contains the local-form identifier (an integer value) specified using the LOCAL-ID clause of the CLASS configuration. This may be used internally in place of the object-identifier of the class. The CStructureName corresponds to the name of the C structure specified with the DATA-TYPE clause of the CLASS configuration. By default the configuration program derives this name from the managed object class name (for example by adding a prefix and capitalizing the first letter of the class name). The user can set this to his/her own data structure name, if desired. The CStructureSize field contains the size of the C structure specified in the DATA-TYPE clause. This is only set in the translation tables (the sizeof() operator may be used to compute this size), and is not used in the configuration stage. The ClassInfoPointer field is used to store a link to the meta data generated by the GDMO compiler for this managed object class definition. The ClassAttributeTablePointer points to a class-specific attribute table that contains an entry for each attribute included in the ATTRIBUTES clause of the CLASS specification. The localFormAttributeld field of each ClassAttributeTable entry contains the local-form identifier value of the attribute. This value is copied from the corresponding entry in the GlobalAttributeTable at the time of generating translation tables or a new configuration file. The fieldName field is

set to the field-name specified for this attribute in the ATTRIBUTES clause, or to the attribute-label if the field-name is omitted. The fieldOffset field is set to the offset of the corresponding field in the C structure associated with the managed object class. This field is set only in the translation tables (the offsetof() macro may be used to compute the offset of the field) and is not used in the configuration stage."

Sasagawa et al., U.S. patent 6,028,863 discloses a device at the terminal unit and a device at the network that support an interim local management (ILMI) protocol. When the power is applied to the device at the terminal unit, it notifies the device at the network of support range information about a VPI/VCI of the device at the terminal unit. The device at the network assigns a VPI/VCI to the device at the terminal unit according to the support range information about the VPI/VCI received in a cold start trap message from the device at the terminal unit when a signal is received from the device at the terminal unit. FIG. 43 shows the data format for use in specifying the connection identifier contained in the signaling message used in the fifth preferred embodiment of the present invention. It shows the details of the element (14) of each message shown in FIGS. 29 through 31. In FIG. 43, the field "virtual path connection identifier" stores the VPCI (corresponding to the VPI), and the field "virtual channel identifier" stores the VCI. The invariable indication field "preferred/exclusive" stores a 3-bit value having one of the following meanings. 000: VPCI is invariable, and VCI is also invariable. 001: VPCI is invariable, but VCI is variable. 010: VPCI is variable, but VCI is invariable.

Each of the independent claims 1, 10, and 14 is patentable over all the references of record including Adusumilli and Sasagawa et al.

Applicants respectfully submit that there are significant differences between what is disclosed in the Adusumilli patent and the subject matter of the pending claims so that it is inappropriate for the Examiner to have rejected claims 1 and 10-14 of the above-identified application under 35 U.S.C. §102 because "[i]t is axiomatic that for prior art to anticipate under §102 it has to meet every element of the claimed invention" (Hybritech Inc. v. Monoclonal Antibodies, Inc., 802 F.2d 1367, 1379, 231 USPQ 81, 90 (Fed. Cir. 1986)). See also In re Bond, 910 F.2d 831, 832, 15 USPQ2d 1566, 1567 (Fed. Cir. 1990) ("every element of the claimed invention must be identically shown in a single reference.").

Only Applicants teach a method, compiler and platform independent framework for parsing and generating data structures that includes sizeof and offsetof functions utilized for defining a length and a location of each parameter of a data structure. Only Applicants teach that the length and location of each parameter of the data structure are stored within an identifier object in a data structure definition used for parsing and generating data structures.

In accordance with features of the invention, Only Applicants teach instead of implementing a table or rule object as a redundant definition of the data structure, the length and location of each of the data structure's parameters are defined within the table or rule object by the sizeof() and offsetof() functions. Thus, the table or rule object is based on the definition of the data structure itself. This differs from

treating the data structure purely as a string of bytes in that the `offsetof()` function provides the location of each parameter within the structure whereas a purely string implementation would only deal with the length of each parameter. Additionally, the `sizeof()` and `offsetof()` functions automatically account for compiler and platform differences which otherwise would lead to alignment problems. Since the `sizeof()` and `offsetof()` functions execute at compile time, no performance penalty results.

Anticipation is a question of fact. In re King, 801 F.2d 1324, 231 USPQ 136 (Fed. Cir. 1986). The inquiry as to whether a reference anticipates a claim must focus on what subject matter is encompassed by the claim and what subject matter is described by the reference. As set forth by the court in Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 218 USPQ 781, 789 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984), it is only necessary for the claims to "'read on' something disclosed in the reference, i.e., all limitations in the claim are found in the reference, or 'fully met' by it." Anticipation under § 102 can be found only when the reference discloses exactly what is claimed; where there are differences between the reference disclosure and the claim, the rejection must be based on § 103 which takes differences into account. Tyler Refrigeration v. Kysor Industrial Corp., 777 F.2d 687, 689, 227 U.S.P.Q. 845 846-47 (Fed. Cir. 1985). It must be shown that the reference contains all of the elements of the claims, and that the elements are arranged in the same way to achieve the same result which is asserted to be an inventive function. Reconsideration of the Adusumilli patent and the subject matter of the pending claims and withdrawal of the rejection of claims 1 and 10-14 of under 35 U.S.C. §102 is respectfully requested.

Applicants acknowledge that the sizeof() and offsetof() functions are built into the C and C++ programming language. Applicants acknowledge that sizeof and offsetof functions are known in the art, such as disclosed by Adusumilli. However, Applicants respectfully submit that Adusumilli does not enable, nor provide any suggestion of parsing and generating data structures by utilizing sizeof and offsetof functions, defining a length and a location of each parameter of a data structure; and storing said length and said location of each said parameter of the data structure within an identifier object in a data structure definition used for parsing and generating data structures, as taught and claimed by Applicants.

Sasagawa et al. adds nothing to render obvious the claimed invention, as recited by independent claims 1, 10, and 14, as amended.

Neither Adusumilli nor Sasagawa et al., individually or considering the total teachings in combination, suggest nor rendered obvious the subject matter of the claimed invention, as recited by independent claims 1, 10, and 14, as amended.

Adusumilli fails to disclose and provides no suggestion of utilizing sizeof and offsetof functions, defining a length and a location of each parameter of a data structure. Adusumilli fails to disclose and provides no suggestion of storing said length and said location of each said parameter of the data structure within an identifier object in a data structure definition used for parsing and generating data structures, as taught by Applicants and recited in the independent claims 1, 10, and 14.

Thus, independent claims 1, 10, and 14 are not anticipated by, nor rendered obvious by the Adusumilli patent. Sasagawa et al. fails to disclose and

Serial No. 09/829,834

provides no suggestion of storing said length and said location of each said parameter of the data structure within an identifier object in a data structure definition, as taught by Applicants and recited in the independent claims 1, 10, and 14.

Thus, each of the independent claims 1, 10, and 14, as amended, is patentable.

Dependent claims 2-9, and 11-13 further define the subject matter of the invention used with recited particular data processing applications.

Rejections based on § 103 must rest on a factual basis with these facts being interpreted without hindsight reconstruction of the invention from the prior art. The Examiner may not, because of doubt that the invention is patentable, resort to speculation, unfounded assumption or hindsight reconstruction to supply deficiencies in the factual basis for the rejection. See *In re Warner*, 379 F.2d 1011, 1017, 154 USPQ 173, 178 (CCPA 1967), cert. denied, 389 U.S. 1057 (1968).

Each of the dependent claims 2-9, 11-13 further define the subject matter of patentable independent claims 1, 10, and each of the dependent claims 2-9, 11-13 is patentable.

Reconsideration and allowance of each of the pending claims 1-14, as amended, is respectfully requested.

Applicants have reviewed all the art of record, and respectfully submit that the claimed invention is patentable over all the art of record, including the references not relied upon by the Examiner for the rejection of the pending claims.

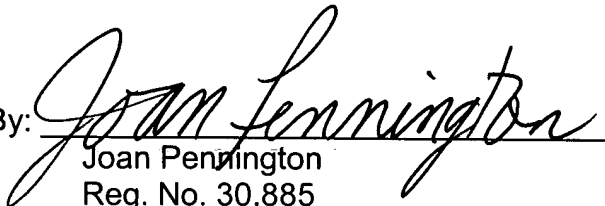
It is believed that the present application is now in condition for allowance

Serial No. 09/829,834

and allowance of each of the pending claims 1-14, as amended, is respectfully requested. Prompt and favorable reconsideration is respectfully requested.

If the Examiner upon considering this amendment should find that a telephone interview would be helpful in expediting allowance of the present application, the Examiner is respectfully urged to call the applicants' attorney at the number listed below.

Respectfully submitted,

By: 
Joan Pennington
Reg. No. 30,885
Telephone: (312) 670-0736